GDP predicts auto sales worldwide

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Personal income, interest rates and the price of gas all influence auto sales, but a country's gross domestic product alone is a good indicator of new sales, says a researcher at the University of Michigan Transportation Research Institute.

In a new study of 48 countries, UMTRI research professor Michael Sivak found that the logarithm of GDP accounted for nearly 90 percent of the variance in the logarithm of vehicle sales from 2005 to 2011.

"This relationship held both for the seven years combined and for each individual year during these seven years—a period that included both general economic prosperity and economic downturn," he said.

Sivak found that average vehicle sales per GDP value for the 48 countries across the time period turned out to be 1,869 vehicles per $1 billion in year 2000 dollars. This figure peaked at 2,375 vehicles in 2007 and 2008, and bottomed out at 1,317 vehicles in 2009—in the midst of the recent economic downturn.

Annual vehicle sales in the individual countries ranged from 16,000 to 18.5 million. The countries' individual annual GDP values ranged from 23 billion to 11.7 trillion in year 2000 dollars.

More information: deepblue.lib.umich.edu/handle/2027.42/96442

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